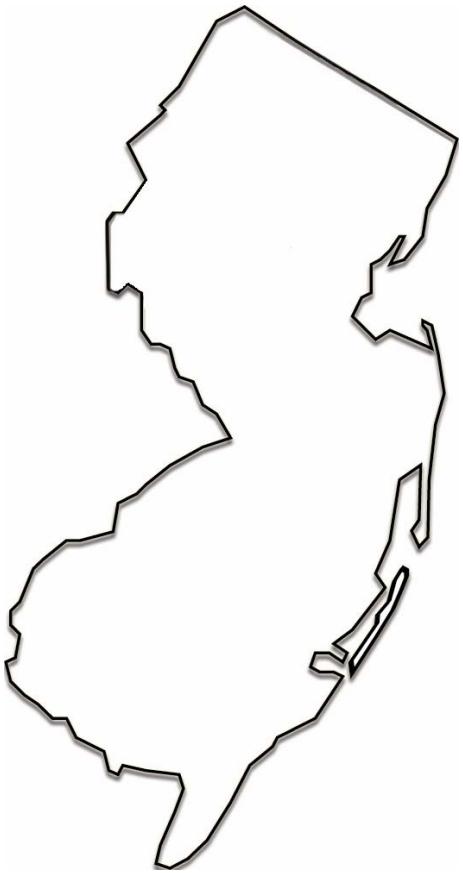
New Jersey's Response to Climate Change



NJ Department of Environmental Protection

Lisa P. Jackson, Commissioner

March 30, 2007

The Climate is Changing

- Climate change is a global issue – NJ trends mirror global trends
- Climate is warming and sea levels are rising
- Precipitation patterns are changing
- It is likely that the warming is leading to increased frequency of extreme weather events including droughts, floods, and lightning storms
- Recent data indicates hurricanes are getting stronger
- These trends spell trouble for flood-prone areas, e.g., the NJ coast

Consequences of Global Warming?

Sea Level Rise

New Jersey is particularly vulnerable to sea level rise due to its highly developed and gently sloping coastline, current coastal erosion and high density of coastal development.

Higher sea levels will increase the severity of storm-related flooding in coastal and bay areas and will result in significant property losses and impacts to the coastal ecosystem, including coastal fresh water supplies due to salt-water intrusion.

Severe erosion has occurred on many NJ beaches

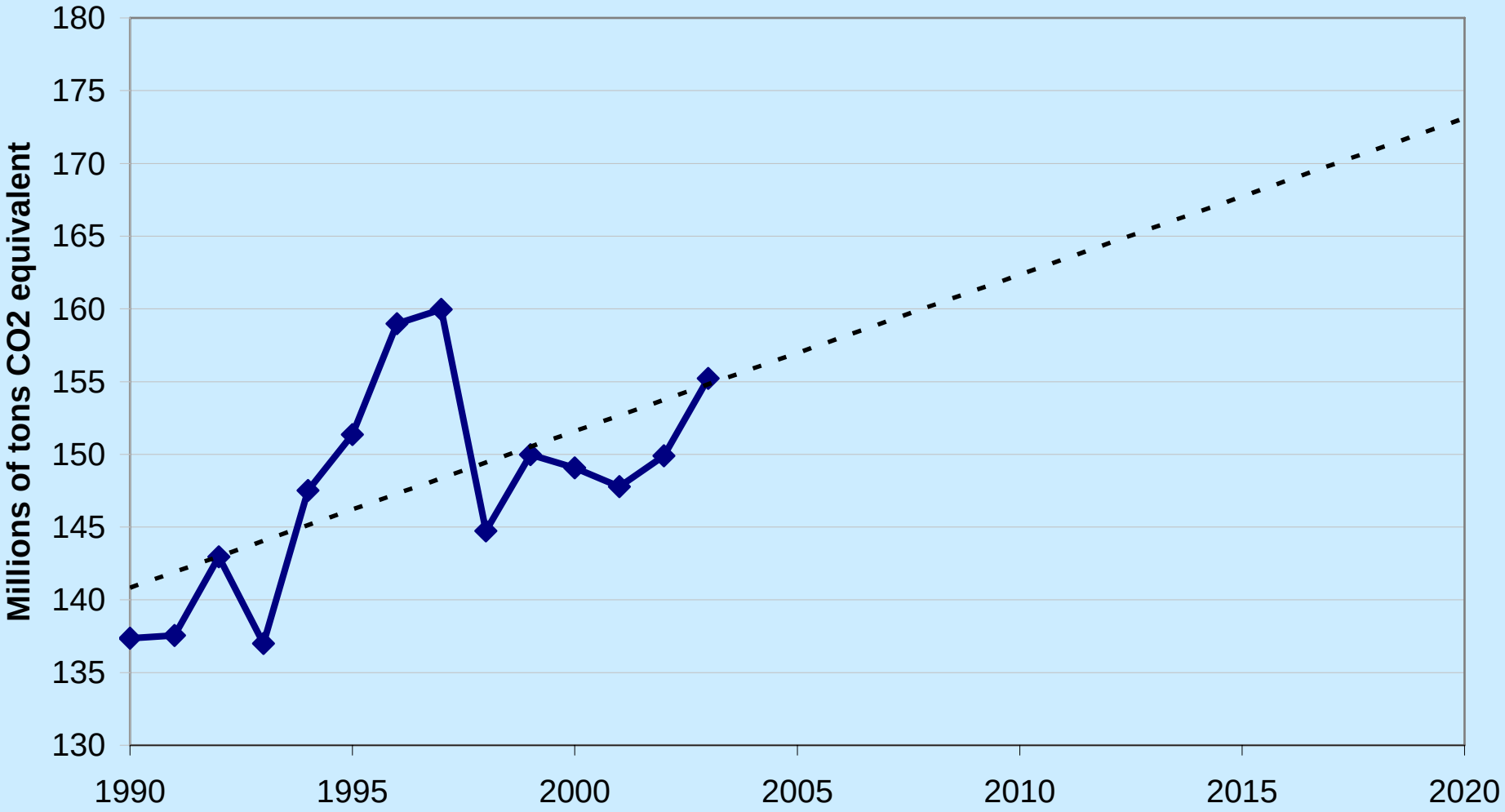
Reducing Climate Change Impacts

- Human-caused emissions of greenhouse gases (GHGs) from energy inefficiency and reliance on fossil fuels is the major cause
- Cutting GHG emissions is essential to prevent dramatic and essentially irreversible change
- Adaptive measures to prepare for the effects of global climate change will also be necessary

Total NJ Estimated CO_2 Equivalent Emissions

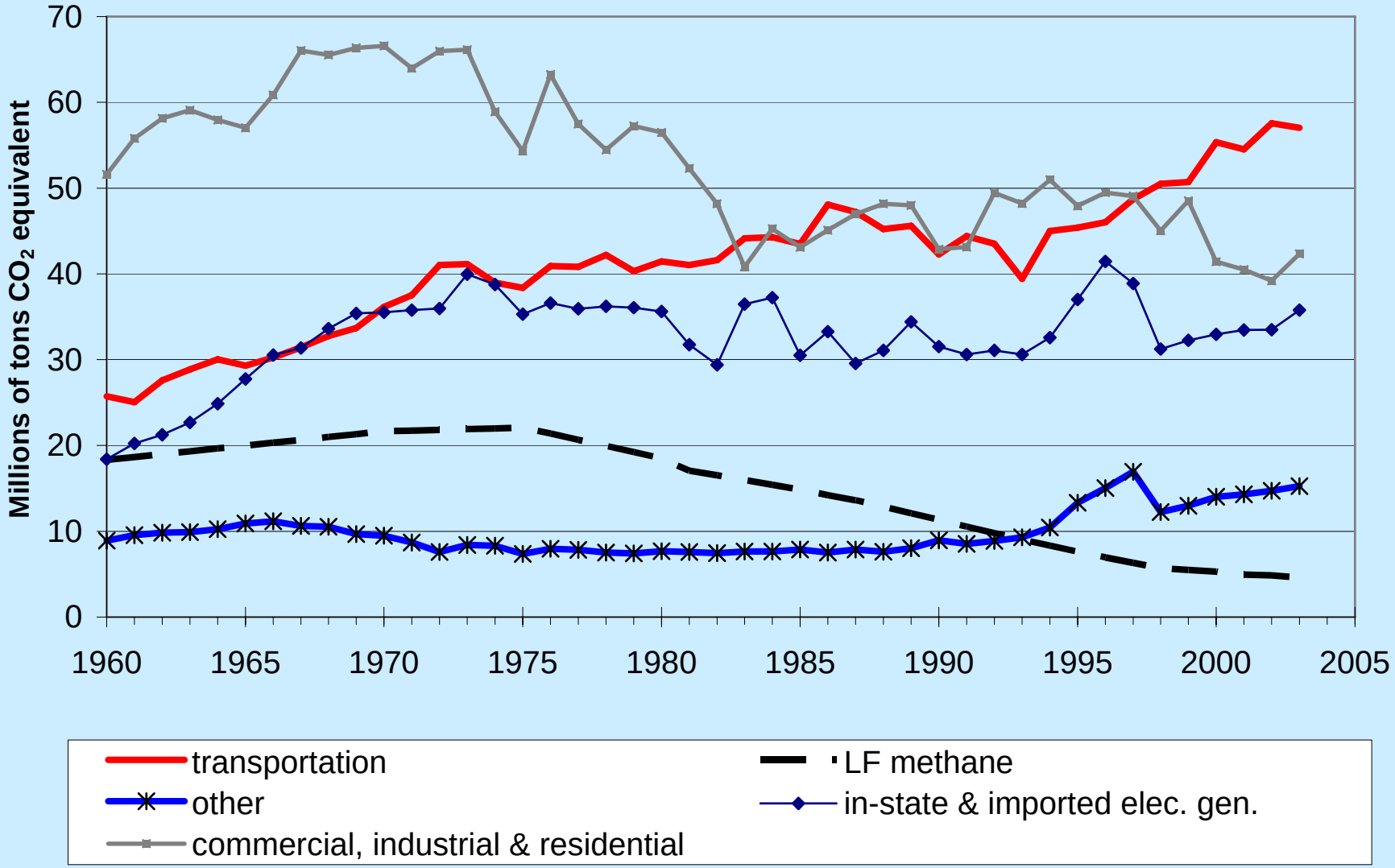
and best-fitting linear trend

Not including ozone-depleting GHGs controlled by international treaty



NJ GHG Emissions, by Sector

Not including ozone-depleting GHGs controlled by international treaty



RGGI Regional Greenhouse Gas Initiative

An Initiative of the Northeast & Mid-Atlantic States of the U.S.

Overview

- First CO_2 cap-and-trade program in U.S.
- Electric power sector focus
- 10-state program beginning in 2009 (Nine MOU signatories; Maryland required to join by statute,mid-2007)
- Designed to allow additional states to join
- Cap: stabilize emissions at approximately current levels through 2014 and reduce emissions 10% below this level by 2019
- More info: http://www.rggi.org

RGGI

RGGI Regional Greenhouse Gas Initiative
An Initiative of the Northeast & Mid-Atlantic States of the U.S.

Process

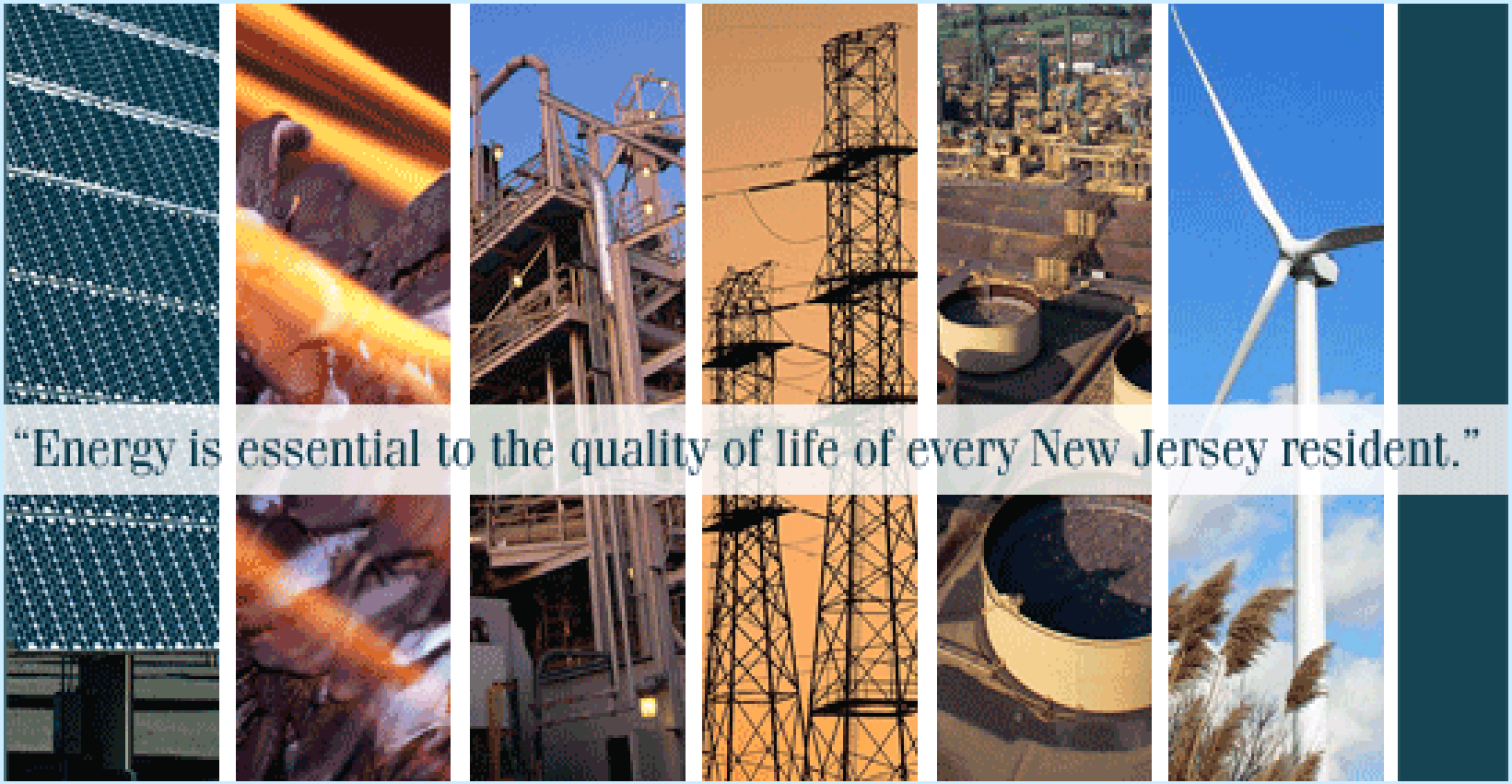
- Dec 20, 2005: MOU signed by 7 states (MA, RI signed Jan-Feb 2007)
- Mar 23, 2006: Draft model rule released to stakeholders and public for comment
- August 15, 2006: Model rule issued
- September, 2006-December, 2007: Individual state rulemaking to implement program (some states may seek legislation related to implementation of allowance auction)
- June, 2007: Maryland participation mandated by statute

RGGI

Notable Design Elements

- Allowance allocation:
  - requires minimum of 25% allocation to provide consumer benefits (e.g., auction of allowances and use of revenue to support end-use energy efficiency and clean energy technologies)
  - Many states, including New Jersey, intend to allocate majority or all of allowances to support consumer benefits
- Emissions offsets:
  - Limit on use of offsets
  - Standardized requirements -- detailed eligibility and "additionality" requirements specified in RGGI model rule
  - Different approach than case-by-case offset project review through Kyoto Protocol Clean Development Mechanism

New Jersey's
Energy Master Plan



Primary Goals of the EMP

- Reduce projected energy use by 20 percent by 2020.

- Meet 20 percent of New Jersey's electricity needs through renewable sources such as wind, biomass and solar.

Why is the EMP so important?

- New Jersey's economy relies on energy:
  - *Production*
  - *Delivery*
  - *Jobs*

- Energy is increasingly expensive.

- New Jersey's demand for energy over the last decade has grown three times as fast as its population!

Planning is a *must*!

Governor Corzine's Executive Order 54 on Greenhouse Gas Emissions

- Recognizes that climate change due to unchecked human-caused greenhouse gas emissions will result in serious adverse environmental and economic impacts for New Jersey
- Sets targets for statewide greenhouse gas emissions reductions
  - Stabilize at 1990 levels by 2020
  - Reduce to 80% below 2006 levels by 2050
- Tasks interagency effort, led by DEP, with recommending specific strategies for attaining the targets
  - GHG strategies evaluation aligned with current Energy Master Plan process
- Efforts already under way place New Jersey on trajectory to meet 2020 target (e.g., RGGI, CA LEV, Energy Master Plan goals, RPS)

Governor's Testimony to Senate Committee on Environment and Public Works (March 1, 2007)

- Called for explicit protection of state greenhouse gas reduction programs from federal preemption
  - legislation should facilitate a role for states as "policy innovators"
- Articulated principles for strong federal climate change legislation, based in part on experience of states in taking a portfolio approach to reducing greenhouse gas emissions
- Advocated that federal climate change legislation institutionalize a role for states in design and implementation of federal regulations
- Advocated for federal funding for leadership states working on climate change
  - states making critical contribution to development of future federal policy despite very limited resources

Looking Ahead

- Need to ensure states aren't left holding the bag on implementation of flawed federal climate change policy
- Assert coordinated leadership on climate change policy at the state executive level
  - Governor Corzine's proposal for the formation of a Governors' Climate Protection Leadership Council
- Need to articulate common principles for strong federal legislation that institutionalizes a vital role for states in design and implementation. Possible venues for development of common principles:
  - ECOS Air Committee, NACAA Global Warming Committee
  - dialog with our public utility commission partners, NARUC
- Should coordinate state GHG market-based policies (e.g., RGGI and Western GHG initiative) to avoid working at cross purposes, facilitate possible linking